

ALTHUSSER AND THE CONCEPT OF THE SPONTANEOUS PHILOSOPHY OF SCIENTISTS

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Althusser introduced and developed the concept of the ‘spontaneous philosophy of scientists’ in the context of the ‘Philosophy Course for Scientists’, a collective enterprise which he launched in 1967-8 at the École Normale Supérieure Rue d’Ulm and whose introductory meetings he supervised during the whole last trimester of 1967; meetings which at the time garnered considerable renown. To understand the significance of the concept, first of all it is important to place it within the context of this course where it was initially put into circulation.

The prospectus distributed to announce the course, signed in Althusser’s name, presented it as ‘a new type of philosophy course’, further stating that it would involve a ‘course of initiation into philosophy, reserved for non-philosophers, and aimed above all at scientists’. At the time, such a project was indeed original: it responded to the intention—political in the last instance—to subtract philosophy from the exclusive attention of philosophers, who had made it into a ‘philosophy for philosophers’, functioning as a closed circle and consequently exempt from any intervention from outside that circle. Now, at the moment the course was launched, Althusser was precisely trying to promote a new conception of philosophy that seemed to him more fitting to the teachings of authentic marxism, and which was articulated around the idea of taking up a position [*prise de position*]. This latter idea comes down to displacing philosophy’s point of application from theory towards practice, by presenting philosophy not as a first-degree theory but as an intervention in theory with the aim of tracing ‘lines of demarcation’. Or, as he would later specify—going further in this direction, and perhaps trying to give it a new inflection—‘class war in theory’, an orientation that undertook in parallel to reflect an equally central preoccupation, that of ‘theoretical practice’. In other words, for Althusser it was a question of withdrawing philosophy from its status as pure speculative discourse, whose abstract matter, so esoteric and dry, was accessible only to professionals disputing amongst themselves like medieval clerics; but also, more broadly, of making it a weapon in the ideological battle, which implied its displacement onto new terrains where it would become accessible, and in the first place audible, to non-specialists, at the price of an initiation whose form would be adapted to this purpose—precisely the objective assigned to the ‘Philosophy Course for Scientists’.

It must be said right away that this programme, once put into action, drew an unexpectedly large audience, which may well indicate that it responded to a need that had remained up to that time unformulated, and that found in it a means of expression and the beginnings of a realisation, in the period of intellectual and political effervescence that immediately preceded the eruption of events in May 1968—a climate rendered faithfully, among others, by Godard’s film *Le Chinoise*, which came out at the same time. For several months, the salle

Dussane, which was the 'salle de spectacle' at the École, where the course—initially announced as to be given in the 'salle des Actes', in surroundings both more solemn and more reserved—had had to be moved because of the sheer numbers of the audience, was crammed full every Monday, the audience overflowing into adjacent corridors and, straining their ears, trying to grasp some fragment of what was being said within—all of which contributed towards making this course something of a public event, news of which was communicated outside by word of mouth, like a trail of gunpowder. The texts presented in the course of each meeting, and in particular the list of 'theses' announced by Althusser over the course of the initial meetings, were distributed as roneotyped documents, a practice far from current at that time and which lent them something of the allure of political tracts. The course, delivered very seriously, in the trenchant tones of theorists conscious of accomplishing, through the mastery they sought to exercise over their own practice, a political mission whose responsibility fell to them, was thus little by little transformed into a sort of public meeting, ratifying the idea that philosophy had ceased to be the affair of privileged and informed elites, an affair that was basically deeply onerous and cut off from all real stakes, and that it had become available to the greater number, to the 'masses' (a word whose resonances were particularly strong at that moment in time); and reinforcing the representation of the École as a centre of revolutionary action or an 'HQ' where great changes were afoot, with consequences for the whole of society. The exact content of these changes remained as yet unspecified, but this did not prevent their urgency from appearing as great as their content was undefined. It can thus be maintained that the course made its modest contribution to the general heating of spirits that preceded, and without doubt in its way contributed to, the final explosion of May—an explosion which, even if it was the confluence of numerous other currents of heterogeneous inspiration, could be explained in part by this movement of intellectual agitation of which the École and its small circles, who in their own way had perturbed the rigid framework in which the academic institutions were locked, had offered, as in microcosm, a concentrated representation.

Who were these 'masses' that the Course in Philosophy for Scientists sought to reach out to? In truth they were cultivated and intellectual circles, hardly popular in their recruitment, whose (largely metaphorical) character as a 'mass' came from the fact that philosophers addressed them not so as to indoctrinate them or to put them to sleep by dispensing their habitual enchantments and magical formulae, but rather, as the prospectus announced at the beginning of the course, to 'initiate' them by furnishing them, under the didactic form assumed as such (the course was indeed a lecture course, delivered in a fairly austere form, not a set of propagandist discourses struck up in demagogical manner) with the indispensable bases necessary for their participation in a theoretical intervention directly or indirectly associated with a societal change, a change in which a philosophical education aiming at a better perception of the modalities of scientific practice was supposed to play a non-negligible role – all of which was a manner of replaying the old theme of the place and the function of philosophy and of the scientist in the City. The initial idea—a not uninteresting idea, which explains why it was straight away taken so seriously, and why it worked so fast and so well—was that the philosopher took it upon himself to address non-philosophers, under the species of 'scientists', as if the latter constituted the true addressees of philosophical discourse, that is to say the initial field in which the latter was to act, in pursuing a practical and political intervention whose aim—to take up an expression Althusser was particularly fond of, and which in his mind was directly associated with the practice of psychoanalysis—was to 'make things move' [*faire bouger les choses*]. The question posed was that of knowing how, as philosophers, to make things move, the proposed response being as follows: By forging an original type of discourse, taking the pedagogical form of a discourse of initiation—that is to say a 'course' properly speaking, according with the mission assigned to an École, that of dispensing teachings; something that would allow philosophy to exit from its own field, by taking as its audience people for whom philosophy is not directly or consciously their affair, so as to convince them that its approaches concerned them, and that, even without realising, they were implicated in it.

The prospectus of the presentation of the course made precise, along these lines, the content of this address:

This course is reserved for non-philosophers. By which is to be understood: It is reserved for specialists in disciplines other than philosophy. It is thus reserved for non-philosopher students of science and letters. This course is above all designed for scientists. By which is to be understood: Given the central

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object of this course (the relations between philosophy and the sciences) it addresses itself firstly to ‘scientists’ (specialists in the mathematical, physico-chemical and biological sciences). But it interests also ‘students of the arts’ [*littéraires*] of diverse disciplines, whose speciality implies a scientific activity.

Not without a little embarrassment, as revealed by the scare-quotes accompanying the repetition of the categories ‘scientist’ and ‘littéraire’, these formulations vindicated the academic partition between disciplines, and restored a hierarchy between them: The course, which addressed ‘scientists’ as a priority, must also interest ‘littéraires’, or at least those among them ‘whose speciality implies a scientific activity’. That is to say, we must understand, those who work in the human sciences, that field of imprecise frontiers and still little-assured status; those sciences which are sciences—or rather ‘sciences’, for in this case the scare-quotes are essential—without yet being entirely scientific. Thus was launched, under the guidance of philosophy, a manoeuvre in which the so-called ‘soft’ sciences were circumscribed by the so-called ‘hard’ sciences, so as to incite a wholesale review of their problematics, and to radically burn bridges with the traditional culture of the Humanities and the illusory guarantees which the latter offered them. This illustrates perfectly the project of a politics of philosophy assigning to the latter as its fundamental mission intervention in the field of theory so as to overturn its existing relations—all of which amounts to a first way in which one might ‘make things move’.

We thus begin to understand how the notion of the ‘spontaneous philosophy of scientists’ came to take its place in this assemblage: Scientists are those who do philosophy ‘spontaneously’, that is to say, in a certain sense, without knowing it—without knowing what they do in practicing philosophy with no preliminary training, uncontrolledly; and without knowing what type of philosophy they do in thus proceeding—and it is necessary to furnish them with the elements that would permit them to recover control of their informal practice of philosophy, and thereby to rectify that practice, by reorienting it in a new direction. The ‘scientists’ blessed as privileged recipients of the course addressed to them by philosophers were thus ‘non-philosophers’ of a very particular type, in so far as they were supposed from the very start to maintain, in the ambiguous mode of ignorance, a certain relation to philosophy—this relation taking the form not only of a need for philosophy, with which each and every one of us can after all be credited, but of a more or less appropriate modality of satisfaction of this need, that is to say—taking up one of the central categories introduced by Althusser at the beginning of the course—a more or less ‘correct’ [*juste*] modality, whose adjustment calls for the intervention of the philosopher. Hence what the scientist, thus interpellated, can expect of the philosopher is a non-spontaneous philosophy, conscious of and master of its stakes, coming together with his spontaneous philosophy and preparing him to critique it by setting in motion in his own practice as a scientist a sort of reform of the understanding (*emendatio intellectus*) whose means the philosopher is best-placed to offer him.

The programme of the course, announced at the end of the prospectus, ran as follows:

- 1/ Philosophy and the Sciences (Althusser)
- 2/ The Object of Science (Macherey)
- 3/ Social Practice and the History of the Sciences (Pêcheux)
- 4/ Epistemology and the History of the Sciences (Fichant)
- 5/ Are There Precursors in the Sciences? (Regnault)
- 6/ The Experimental Method (Balibar)
- 7/ What is a Model? (Badiou)

Owing to various rearrangements, concerning principally the schedule of meetings (the introductory exposition by Althusser initially planned to occupy one evening ultimately took place over five successive meetings), this programme, started in November 1967, in fact ran for the rest of the academic year, up until April 1968 when it was interrupted after Badiou, the last to speak, brought its proceedings to a close: His last lectures practically coincided with the eruption of the events of May 1968.

So as to assure a better diffusion of their content, Althusser then created under the auspices of the *Théorie* imprint he had launched in 1965 through Éditions Maspero with his *Pour Marx*, a special series entitled (reprising the terms of the initial project) ‘Philosophy Course for Scientists’, in which almost immediately two volumes appeared in 1969. The first to come out, numbered IV, was *The Concept of Model (Introduction to a Materialist Epistemology of Mathematics)*, reprising Badiou’s intervention. (In 2007, Fayard published a new, completed edition of this text, which Badiou today presents as his first philosophical ‘work’). At the beginning of the original volume we find a notice of presentation of the whole series, worded as follows:

Philosophy Course for Scientists

We shall publish under this title a series of booklets which bring together the material of the courses that were given (or were not able to be) at the *École Normale Supérieure* during winter 1967-1968.

Planned publications:

- I. Introduction (L. Althusser)
- II. Experience and Experimentation (P. Macherey, E. Balibar)
- III. The ‘Epistemological Break’ (F. Regnault, M. Pécheux)
- IV. The Concept of Model (A. Badiou)
- V. The Idea of a History of Sciences (M. Fichant)
- VI. Provisional Conclusion

The publications announced will appear in an order different from the order of exposition within the course, for purely material reasons. This order of appearance will not affect the comprehension of the content of the publications, each of which is presented respectively as a relatively autonomous ‘whole’.

A few months later there followed a second volume, numbered III, entitled ‘On the History of the Sciences’, in which Pécheux and Fichant’s contributions were compiled, modifying the preceding organisational order of the series, which was now reduced to five titles, rather than six as previously announced:

- I. Introduction, L. Althusser (forthcoming)
- II. Experience and Experimentation, P. Macherey, E. Balibar (forthcoming)
- III. On the History of the Sciences, M. Fichant, M. Pécheux
- IV. The Concept of Model, A. Badiou (available)
- V. Provisional Conclusion (forthcoming)

It will be noted that the concluding volume of this series is not associated with any author’s name, thus tending to reinforce the ‘collective’ character of the enterprise. The modification of the initial plan owed to the fact that F. Regnault—who, in the meantime, had distanced himself from Althusser, and no longer wanted to encourage the impression that he was part of the group united around the latter—had withdrawn the text of the lecture he gave on 25 February 1968 on the theme of ‘remaking’ [*refonte*] in the history of the sciences. His analysis had been replaced by four pages of ‘Definitions’ at the beginning of the Fichant and Pécheux volume, signed in the name of Balibar and Pécheux, which summed up its content. Volumes II and V were never published, and Althusser himself would delay many years before he returned to the project in 1974, with a text entitled ‘Philosophy and the Spontaneous Philosophy of Scientists (1967)’—still in this series ‘Philosophy Course for Scientists’ but with no reference to the initially-planned numbering—a text being in part a review of the first four interventions. He had provisionally kept back that of the fifth, to which he accorded a particular importance, and which would demand to be analysed for itself; he only published it very much later, in the second volume of the posthumous collection edited by François Matheron, *Écrits philosophiques et politiques*, under the title ‘Du côté de la philosophie’. In the note to his book, which was the last to appear in the series, Althusser would state: ‘For various reasons the other lectures, although announced, could not be published’. Nevertheless, the roneotyped texts still exist, and a complete collection of them has been deposited and is conserved in the library of the ENS.

In placing an express mention of the date—1967—on the cover of the work published in 1974, Althusser wished to signify the conjunctural character of his programme, whose content he had for a long time hesitated

to deliver in printed form, and from which, in the meantime, and with the conjuncture having shifted, he had distanced himself from without having completely disavowed it. The very first volume of the series to have appeared, Badiou's, was already preceded by a note whose terms had doubtless been carefully weighed, signed 'Théorie, December 1968': It was probably published by common accord between Althusser and Badiou, who at that moment marched hand in hand. Already in this note is denounced—much water having flowed under the bridge during the course of 1968—the 'theoreticist' character of an approach diagnosed as 'harking back to a bygone conjuncture':

The struggle, even when it is ideological, demands an altogether different style of working and a combativeness both lucid and correct [*juste*]. It is no longer a question of taking aim at a target without striking it [...] We entertain no illusions: the region in which this work is situated (the doctrine of science) is not only very limited, but quite indirect, but it would be dangerous for us to be mistaken about the meaning of this limitation. We nevertheless believe that it would be useful to call to mind the angle from which the revival of 'Dialectical Materialism', in our eyes and from our point of view, might be pursued or consolidated.

It does not go without saying, then, that one should take up again the terms of a project that would seem to have been immediately surpassed, thereby going against the grain of a history that had set itself up to advance at high speed, before having to retreat with equal rapidity—the retreat that was the story of the eighties, and whose consequences are still being felt today. The same year that 'Philosophy and the Spontaneous Philosophy of Scientists (1967)' appeared, 1974, also saw the publication—in the series *Analysis*, which Althusser, who had begun to fall out with his first publisher Maspero, had launched with Éditions Hachette Littérature—of his *Éléments d'autocritique*, in which were reprised, with a view to their rectification, the elements developed in the course concerning the rupture between science and ideology, but no longer with any reference to a spontaneous philosophy of scientists, something that signifies that the notion of philosophy's first task being to address a discourse to scientists had been diagnosed as the symptom of a theoreticist deviation, the very same one that had already been denounced in the note in Badiou's book.

All of the above so as to understand that the thematic of the spontaneous philosophy of scientists is precisely situated and dated, and represents a step—only one step but a significant step nonetheless—in the unfolding of a philosophical activism eager to cleave more closely to historical reality and to the political situation—an exigency which constrains it to shift its sights in a makeshift and perhaps ultimately disorderly manner.



'Philosophy and the Spontaneous Philosophy of Scientists': When, to entitle the book in which, after much hesitation, he decided to return in part to the content of the courses he had given at the end of 1967 in the very particular context we have just evoked, he chose this formula which had not figured in the preceding announcements of the series 'Philosophy Course for Scientists', deciding also not to number this volume along with those that had already appeared, Althusser obviously intended to assure a relative autonomy for this publication whose status was more problematic, and to dissociate it from the ensemble from which it issued, an ensemble which, as had become manifest in the meantime, had the character of an interrupted enterprise whose importance had only been provisional and which was insufficiently coherent to be presented as a consistent whole. Independently of these formal considerations, this formula above all had the advantage of attracting the attention of the reader immediately to what constituted, on the level of its content, one of the principal theoretical stakes of the book, namely the fact that the discourse addressed by the philosopher to non-philosophers, under the species of 'scientists', so as to draw philosophy out of the speculative circle in which it had been locked, arose from the confrontation between two occurrences or realisations of philosophy as such: That connoted by the simple appellation—a simplicity that was only apparent, for in reality it harboured a hidden tension—'philosophy'; and that whose more complex designation calls for a decrypting, for it is difficult at first to see to what type of object it is to be related: 'the spontaneous philosophy of scientists'. Whence an

interrogation concerning the status of the ‘and’ on the basis of which this titular formula was constructed: Must it be taken in a purely enumerative sense, or does it signal the existence, between the two occurrences of the philosophical that it brings to presence, of a potentially agonistic confrontation?

These remarks lead us immediately to take into account the paradox upon which the whole approach of philosophy rests, a paradox from which its deployment is inseparable, even if it most often passes unremarked, thus giving rise to all sorts of misconceptions about the nature of the philosophical operation. This paradox, around which Althusser’s reflection essentially turns, in the full sense of the verb ‘to turn’, is the following: Philosophy being a discursive affair, which means materially that it ‘does’ nothing except align words in a certain order, producing statements, the question arises straight away of knowing to what this discourse relates, what its ‘object’ is. Now—and this is the principal idea advanced by Althusser—philosophy has no object, by which we should understand, no object external to itself; which is to say that philosophy is its own proper object, and therefore that this discourse, a strange kind of discourse, speaks of nothing but itself, in an interminable rumination that reduces it ceaselessly to itself, with no external issue. Whence this circle, identified in the conclusion of the first lecture:

Such is the ‘game’ of philosophy, as we practice it—drawing lines of demarcation that produce new philosophical questions without end. Philosophy does not respond like a science to the questions it produces, with demonstrated solutions or proven findings (in the scientific sense of these words): it responds by stating Theses which are correct, not arbitrary, and which in turn draw new lines of demarcation, giving rise to new philosophical questions, *ad infinitum*.

Let us note that the expression ‘philosophy’ which appears many times in this passage must be understood on different levels: On the one hand it refers to a singular manner of putting philosophical activity to work, ‘philosophy as we practice it’, the subtext being that ‘we’ practice it in an original, innovative manner, taking sides [*en prenant parti*]; on the other, it refers at the same time to philosophy in general, considered without exception, in all its manifestations—manifestations which have always, since Plato, consisted in ‘tracing lines of demarcation’. But then what is revolutionary in reducing philosophy to tracing lines of demarcation, if, ever since philosophy has existed, it has never proceeded otherwise? There is only one possible response to this question, rather striking to hear: A new practice of philosophy is that which traces lines of demarcation in the fact of tracing lines of demarcation. Why? Because there are many ways of tracing lines of demarcation: Either doing so without saying so, in ignorance and concealing it, as happens in most cases; or doing so in an avowed and declarative way, drawing the full consequences, consequences which are in the last instance political—which is precisely the approach deployed by Althusser, an approach which, paradoxically, conforms to that of philosophy in its origins at the same time as being shifted, displaced, in a strong sense, in relation to it:

They always do it, but they do not say (or only rarely) that the practice of philosophy consists in this demarcation, in this distinction, in this drawing of a line. We say it (and we will say many other things). By recognizing this, by saying it and thinking it, we separate ourselves from them. Even as we take note of the practice of philosophy, we exercise it, but we do so in order to transform it.

So, philosophy traces lines of demarcation. But these lines of demarcation, where does it trace them? It traces them in its proper field of intervention, which is not, as in the case in the sciences, a domain of reality to be known, but itself, and nothing other than itself, its proper practice upon which it never ceases to return, which is another way of saying that it turns in circles, and that it is its very nature thus to turn. To philosophise is to turn in circles, and incidentally to fall into holes, as Althusser recalls in his first lecture where he refers to the passage in the Theaetetus where Plato recounts the story of Thales, who broke his legs because he walked with his eyes raised to the sky without looking where he was going, to the great amusement of the Thracian servant who, delighted, observed his downfall.

Althusser takes up his reflection on this circle once more at the beginning of the second lecture:

I entered the necessary circle deliberately. Why? To show even crudely that whilst it is indispensable to leave philosophy in order to understand it, we must guard against the illusion of being able to provide a definition—that is, a knowledge—of philosophy that would be able radically to escape from philosophy: there is no possibility of achieving a science of philosophy or a ‘meta-philosophy’; one cannot radically escape the circle of philosophy. All objective knowledge of philosophy is in effect at the same time a position within philosophy, and therefore a Thesis in and on philosophy; that is why you felt, on the contrary, that I could speak of philosophy in general only from a certain position in philosophy: demarcating myself, by distancing myself from other existing positions. There is no objective discourse about philosophy that is not itself philosophical, and therefore a discourse based upon certain positions within philosophy.

Understand: To exit from philosophy, something that is ‘indispensable in order to understand it’, is still and always to turn in its circle. There is no exit from philosophy except an internal one, which reduces it reflexively to itself, which is the condition for its managing, in effecting this ‘turn’, even so, to see things differently, and to produce effects, which are not however effects of truth in the same sense in which scientific knowledge seeks to produce such effects. Althusser takes a calculated risk in interpellating his audience of non-philosophers in such terms: Spinning them in circles to the point of inciting them to think that philosophy has nothing to offer them except the prospect of travelling ‘roads which lead nowhere’, impasses properly speaking—an operation that one cannot see leading to a positive net outcome. So, why bother to initiate oneself into philosophy? What benefit might one hope for from an initiation whose programme implies that all promise of truth should be relinquished, in whatever form?

The thesis according to which philosophy has nothing to do with anything other than itself, disqualifying from the start any pretention it might have to conquer an external domain of reality upon which it would be able to assure itself of exclusive viewing rights, as normally claimed by all forms of knowledge, might be stated in another way: There is always already philosophy, and it is with this fact—namely, that whether one likes it or not, whether one recognises it or not, it will always already be there—that it must occupy itself qua problem that is its own to resolve, in so far as such a problem can be resolved. The discourse that Althusser addressed to scientists, certified representatives of non-philosophers, can thus be summed up as follows: You expect us to teach you something that is new to you, something that you do not have and that you are interested in acquiring; but the only thing that we have to reveal to you about this ‘something new’ is that, even though you do not know it, you already have it; you have it in the form of your ‘spontaneous philosophy of scientists’, because of the fact that, just as one cannot exit from philosophy, one cannot enter it, very simply because one is already in it. You, scientists, bathe in philosophy, which is your element, like fish in water. Or again, to say it otherwise: You believe that philosophy is before you, as something you have to learn from the philosopher because he knows it whereas you do not; now, there is indeed something that you do not know about philosophy—namely, that it is not before you as you imagine, but behind you, in that element of the always-already over which the veil of ignorance is usually drawn. Therefore it is not a problem of not knowing enough philosophy but, in a very particular sense of the word ‘know’ which comprises a relation with non-knowledge, of knowing it already too well, in forms whose confusion needs to be unravelled, necessitating an intervention that will trace within them their lines of demarcation.

What are these forms? In the fourth course, dedicated to a critical—extremely polemical—rereading of the inaugural lecture that Jacques Monod had just given at the Collège de France, Althusser distinguishes two: The spontaneous philosophy of scientists (SPS) and the conception of the world (CW). The first, the SPS, is constituted by ideas that scientists have on the subject of their own practice, ideas which are already philosophical in the sense that they are displaced in relation to that practice which they propose a primitive interpretation of—something which, very materially, very concretely, gives them the status of false, or at least partly false, ideas; the second, CW, is an ersatz philosophy, a vague discourse which draws its apparent systematicity from its being

cut loose from any reference whatsoever to any practice, and which claims a general validity. It is the first form that Althusser prioritises. He locates its existence in the second part of the first course dedicated to the study of an example, the theme of interdisciplinarity:

There are false ideas about science, not simply in the heads of philosophers but in the heads of scientists themselves: false ‘obviousnesses’ that, far from being means of making progress, are in reality ‘epistemological obstacles’ (Bachelard). They must be criticized and dispelled by showing that the imaginary solutions they offer in fact conceal real problems (Thesis 9). But it is necessary to go still further: to recognize that it is not by chance that these false ideas reign in certain regions within the domain of scientific activity. They are non-scientific, ideological ideas and representations. They form what we will provisionally call scientific ideology, or the ideology of scientists. A philosophy capable of discerning and criticizing them can have the effect of drawing the attention of scientists to the existence and efficacy of the epistemological obstacle that this spontaneous scientific ideology represents: the representation that scientists have of their own practice, and of their relationship to their own practice. Here again philosophy does not substitute itself for science: it intervenes, in order to clear a path, to open the space in which a correct [*juste*] line may then be drawn.

We shall leave aside for now the very complex question raised by the reference to Bachelard and the theme of the ‘epistemological obstacle’, and content ourselves for the moment with referring to the study presented by Etienne Balibar in his article ‘Le concept de “coupure épistémologique” de Gaston Bachelard à Louis Althusser’, which reviews this difficult question. What matters to us now is to understand in what respect the spontaneous philosophy of scientists is at base ‘ideological’, and more precisely, corresponds to the ideology that scientists form of their own practice, in the very unfolding of the latter.

Let’s first tackle the ‘spontaneous’ character of this ideology of scientific practice. Using one of those abrupt and remarkable formulae for which he had such a talent, Althusser declared immediately after the passage just cited:

I have only one more word to say about this ‘spontaneous’ ideology: we will see that it is ‘spontaneous’ because it is not.

Althusser’s whole oeuvre attests to a veritable repulsion in regard to the thematic, to his eyes deeply demagogical and racketeering, of spontaneity; a repulsion undoubtedly inspired by Lenin’s critique of the evil consequences of ‘spontaneism’ for the worker’s movement. The spontaneous is never but ‘spontaneous’ in scare-quotes, that is to say a false spontaneity which is in reality the result of a manipulation, an artifice, an editing. On this point, Althusser joins with the Barthes of *Mythologies* and his refusal of the illusion of the ‘natural’—a factitious illusion which when examined reveals itself to be socially constructed, and thus conditioned. If it is true that philosophy is always already there, qua state of fact given only to be taken up either in the form of a reassessment or a rectification, it would be erroneous to conclude that its prior existence is that of an immediate given without bias, not already worked by the tensions that prevent it from speaking in one voice, of a naked speech which would not be from the start subject to deformations. What is proper to all origins is to be counterfeit: Nothing ever begins absolutely, and philosophical thought, which precedes itself, does not escape this law. When it presents itself in the guise of spontaneity, as is the case with the spontaneous philosophy of scientists, this spontaneity can only be apparent: It dissimulates contradictions that it could hardly be expected to resolve and, far from eliminating them, it propagates them.

This said, what are the tensions to which the spontaneous philosophy of scientists falls prey, hidden tensions that it falls to philosophy to reveal in tracing their lines of demarcation? This point begins to be elucidated with thesis 20, which is worded as follows:

The primary function of philosophy is to draw a line of demarcation between the ideological of the ideologies on the one hand, and the scientific of the sciences on the other.

It is precisely this function that it fulfills with regard to the spontaneous philosophy of scientists, in making visible the division between that which, in the latter, belongs to the ideological properly speaking and that which belongs to the scientific properly speaking; in rendering manifest that the naive and frank simplicity it advertises masks a division in virtue of which it is prey to a merciless struggle—a struggle which, like any struggle, is a struggle for domination. Behind its smooth and consensual discourse, the spontaneous philosophy of scientists will thus be the site of a confrontation whose terms are the ideological and the scientific. Here we find in play the cut between science and ideology, without doubt the most highly-contested point in Althusser's whole approach, and one to which, in 1974, at the same time as he published *Philosophie et philosophie spontanée des savants*, he also returned in his *Elements d'autocritique*, whose first chapters are dedicated precisely to the theme of the 'cut'—he writes the word thus systematically, in scare-quotes, signalling with this graphical artifice the difficulties pertaining to his usage, which is anything but innocent—a theme in which he sees the major symptom of his 'theoreticist error', as he now calls it.

What does this idea of the cut mean anyway, with or without scare-quotes? It refers to the effectuation of a gesture, which tends to divide, to decide, to allot, which expresses also the fact of tracing lines of demarcation or of taking up a position, which, according to Althusser, defines at its base the activity of philosophy, making it a 'taking sides' [*prise de parti*], in the strong sense of the term. Why engage in such an operation? Why break so as to make breaks manifest? To dissipate the fusional illusions of continuity, such as developed, for example, by the discourse of the universal which philosophy habitually takes up; so as to expose to view what it does in reality, namely occupy positions of domination within what Kant himself called its *Kampfplatz*, and which he hoped would one day give way to a perpetual peace. Behind the cut, there is thus the rupture, that is to say the will to have done with the attitudes of compromise that would sacrifice everything to the desire for unity, without seeing that the reconciliations obtained this way—a sort of 'third way'—are at most provisional and do not put an end materially to the divisions which they re-cover with a veil of ignorance. To recognise the necessity of this rupture is to draw the full consequences of the fact that there are everywhere contradictions, tensions, struggle, conflict, and that no practice escapes them, including the activity of scientific knowledge, as is attested precisely by the existence of the spontaneous philosophy of scientists, even if its aim is to partially camouflage this situation:

If the content of the SPS is analysed, the following fact may be registered: the content of the SPS is contradictory.

To identify specifically the contradiction to which the spontaneous philosophy of scientists falls prey, Althusser proposes then to distinguish two elements, which he calls element A—an element he diagnoses as 'intra-scientific'—and element B—which is 'extra-scientific'. Element A is constituted by a certain number of convictions, which are directly attached to the practice of scientific knowledge: the belief in the objective reality of the contents of consciousness; the belief in the capacity of knowledge to objectively master those contents; the belief in the effectiveness of the method which produces this scientific knowledge. These beliefs are effectively indissociable from the practice of scientific knowledge, and it is hard to see how the latter could proceed if it were to reject them—this is what justifies Althusser's recognising in them a 'materialist' character, in the sense that they bond themselves to the materiality of the activity of scientific knowledge, of which they offer a formal distillation. Element B is of a wholly other nature, and relates to scientific practice without being its product—which is to say, concretely, that it exploits that practice:

[I]t is a reflection on scientific practice by means of philosophical Theses elaborated outside this practice by the religious, spiritualist or idealist-critical 'philosophies of science' manufactured by philosophers or scientists.

This extra-scientific element may very well be elaborated by professional scientists, which does not prevent its having been 'fabricated'. That is to say, it relates to the real practice of scientific knowledge as an element borrowed from elsewhere, overlaid on its effective procedure with a view to recuperation and exploitation:

In the SPS the (materialist) Element 1 is, in the vast majority of cases, dominated by [the idealist] Element 2 (and the exceptions are therefore all the more noteworthy). This situation reproduces in the heart of the SPS the philosophical balance of power that exists between materialism and idealism in the world in which scientists known to us live, and the domination of idealism over materialism.

With hindsight, one might find it excessively simplistic to reduce the philosophical game, as pursued in larval forms through the spontaneous philosophy of scientists, to the opposition of two forces, identified by the categories of idealism and materialism, categories whose content is particularly unclear in this usage: There is materialism and then there is materialism, and it is not easy to isolate a pure form of materialism innocent of all connivance with idealism; and, inversely, can an idealism be thinkable, credible, if it does not comprise a materialist basis, however minimal? But these are precisely the difficulties at the heart of the investigation pursued by Althusser, who intends first of all to bring to light the fact that where, because one is incited, conditioned and prompted to do so, one sees the simple and the unified, there is the complex and the divided, that is to say, in every possible and imaginable form, conflict and struggle; struggle and conflict whose issue is never definitively assured. It might be said, in other words, that the philosophical operation, at least as it is effected under the auspices of the spontaneous philosophy of scientists, is fundamentally equivocal: Its messages, supposedly clear and definitive such as they are spontaneously delivered, call for decryption; they matter above all as symptoms, precisely as symptoms of a theoretical-practical conjuncture, historico-social in the last instance, whose specific tensions they translate.

And it is here that philosophy can intervene, in bringing things to be seen otherwise, something it achieves by going over the steps, the traces, so as to bring into the light of day the divisions that work the interior—that is, in fixing as its first objective the dissipation of the illusions of spontaneity. In the first lecture, Althusser had declared as much:

Their practice, which they carry out in a framework defined by laws that they do not control, thus spontaneously produces an ideology which they live without having any reason to break out of it. But matters do not end there. Their own ideology, the spontaneous ideology of their [...] does not depend solely on their own practice: it depends mainly and in the last instance on the dominant ideological system of the society in which they live. Ultimately, it is this ideological system especially that governs the very forms of their ideology [...] What seems to happen before their eyes happens, in reality, behind their backs.

An echo of which can be found in the third lecture, in this exclamation:

And they think that all this comes from their practice itself!

We can thus begin better to comprehend in what consists the intervention of philosophy upon the spontaneous philosophy of scientists: Its first aim is to make it understood that there is no scientificity that is not from the start mixed with ideology, in conditions under which the two are indiscernible. There is no pure scientificity. Better, there is no pure theoreticity: For philosophy, which is at the heart of the combat between the forces which dispute the field of knowledge—forces which are at base the same as those that work social action, for they are in the last instance political forces—philosophy itself is not exempt from the risk of equivocity that is to be denounced. It does not rise above the field of battle, over which it could boast a disengaged, non-implicated point of view uncontaminated by the stakes of the struggle which constitute the context of its intervention:

Philosophy itself is therefore part of the conjuncture in which it intervenes: it exists within this conjuncture, it exists within the 'Whole'. It follows that philosophy cannot entertain an external, purely speculative relation, a relation of pure knowledge to the conjuncture, because it takes part in this ensemble.

In other words, philosophy cannot cleave to purely theoretical interests, feigning ignorance of the fact that these theoretical interests are intricately mixed with practical interests, in a field of battle where more than ideas are at stake.

On this basis the content of thesis 20 begins to become clearer—the thesis whose statement, let us recall, is as follows:

The primary function of philosophy is to draw a line of demarcation between the ideological of the ideologies on the one hand, and the scientific of the sciences on the other.

This convoluted formula, with its reference to the 'ideological of the ideologies' and the 'scientific of the sciences' may perhaps allow us better to comprehend what is hidden behind the project of the cut between science and ideology, a project whose ostensible simplicity masks all sorts of underlying difficulties. Why speak of the ideological of ideologies and not simply of ideology? And the same for the scientific of sciences. Why this passage from the substantives 'ideology' and 'science', to their adjective forms 'ideological' and 'scientific', the latter being in turn resubstantiated in the formulae 'the ideological', 'the scientific', something which has the air of a word-game, a pure verbal overelaboration? Althusser addresses this difficulty in a crucial passage of the second course, which must be cited in its entirety:

Philosophy intervenes in a certain reality: 'theory'. This notion perhaps remains a little vague, but we know what interests us in it. Philosophy intervenes in the indistinct reality in which the sciences, theoretical ideologies and philosophy itself figure. What are theoretical ideologies? Let us advance a provisional definition: they are, in the last instance, and even when they are unrecognizable as such, forms of practical ideologies, transformed within theory.

The result of philosophical intervention, such as we have conceived it, is to draw, in this indistinct reality, a line of demarcation that separates, in each case, the scientific from the ideological. This line of demarcation may be completely covered over, denied or effaced in most philosophies: it is essential to their existence, despite the denegation. Its denegation is simply the common form of its existence.

This analysis therefore brings out three essential terms:

1. the intervention of philosophy;
2. the reality in which this intervention takes place;
3. the result of this intervention.

I will go right to the heart of things by saying that the enigma of philosophy is contained in the difference between the reality in which it intervenes (the domain of the sciences + theoretical ideologies + philosophy) and the result that its intervention produces (the distinction between the scientific and the ideological).

This difference appears in the form of a difference between words. But (note the paradox!) the words that we employ to designate the 'reality' in which . . . , and the words we use to designate the 'result' of the line we have drawn, are virtually the same: on the one hand, the sciences and theoretical ideologies; on the other, the scientific and the ideological. On the one hand, nouns; on the other, their adjectival forms. Is this not the same thing? Are we not repeating in the result what we already have

in the reality? It would seem that the same characters are in opposition: sometimes in the form of nouns, sometimes in the form of adjectives. Is this not simply a nominal distinction, a terminological difference and therefore merely apparent? Is the result produced by the philosophical intervention really distinguished from the reality in which it intervenes, if it is already inscribed in that reality? In other words, does not the whole of philosophy consist simply in repeating, in the same words, what is already inscribed in reality? Hence in modifying words without producing anything new?

Yes, philosophy does act by modifying words and their order. But they are theoretical words, and it is this difference between words that allows something new in reality, something that was hidden and covered over, to appear and be seen. The expression the scientific is not identical to the expression the sciences; the expression the ideological is not identical to the expression theoretical ideologies. The new expressions do not reproduce the older ones: they bring to light a contradictory couple, a philosophical couple. The sciences are sciences: they are not philosophy. Theoretical ideologies are theoretical ideologies: they are not reducible to philosophy. But 'the scientific' and 'the ideological' are philosophical categories and the contradictory couple they form is brought to light by philosophy: it is philosophical.

To sum up: The intervention effected by philosophy is one thing; the reality in which it is effected is another; the effects of its intervention are yet another. What distinguishes the reality in which philosophy intervenes from the new form in which this reality appears after philosophy's intervention? In the first case, it is a matter of an 'indistinct reality' where we find, inextricably mixed, sciences, ideologies and philosophy, in forms impossible to extricate, their confusion being an essential element of the inexpiable struggle underway in this same reality. In the second case it is a matter of a reality expressly divided, worked by an opposition between 'the scientific' and 'the ideological', an opposition which philosophy, and philosophy alone, has brought to light, which is to say that in fact it did not pre-exist the intervention of philosophy, and is the effect of that very intervention. In other words, there is not at the level of reality a scientific and an ideological in-itself, each possessing a distinct identity that would be directly recognisable. It is philosophy which, through its intervention, produces, literally makes emerge, the scientific and the ideological under the species of their division—and not separately, but as they exist each for the other. What the philosophical intervention reveals is not the scientific as such or the ideological as such, side by side, but their relation of opposition, inside which they can be grasped—which they cannot be independently of this relation, very simply because they have no reality outside of this relation. Only philosophy has the capacity to make the latter appear, through the tracing of its lines of demarcation.

This manner of seeing things immediately necessitates the following remark: That the scientific and the ideological should be conflated from the start, that is to say that they compose together the initial given upon which knowledge must work, is not an idea that belongs solely to Althusser. He shares it with the tradition of an historical epistemology developed by Bachelard and Canguilhem, which is why they are, for him, the authors of reference in this regard. He takes up this idea from them, and disengages it from the context in which it appeared, that of the history of sciences and its specific problems; he generalises its significance, by refracting it across the prism of that formula of Spinoza's which exemplifies, to his eyes, what a materialist theory of knowledge must be: *verum index sui et falsi*, that is to say that the true and the false reveal themselves necessarily together and not separately, in the sense that they appear as the two poles of the same process or order and connection, which is simultaneously the order and connection of ideas, and the order and connection of things from which it draws its necessity. This said, Althusser, even in taking up this way of seeing things from the historians of science whose debtor, or even inheritor, he presents himself as, does not content himself with granting it a general philosophical significance, but inflects the content upon the foundation. The division between true and false cannot be an immemorial given of nature or of reason but only a conquest of the knowing mind, a conquest that does not wear the allure of a continuous progression—Bachelard expresses this through the conception of a relation between outdated science and sanctioned science, which is not without a certain resemblance to the thesis of division between the ideological and the scientific. But from his point of view, this relation is put in place entirely on its own account, if one might so speak, without appealing to a

third instance—it is the history of scientific knowledge which, through its detours and its projections, ceaselessly makes new problems emerge, and ends up putting in place systems of cognitive apprehension of the world. The latter, in making themselves known as true, reject at the same moment all the prejudices that they have had to eliminate in order to constitute themselves with sufficient force so as to impose this recognition—which is the secret of the epistemological break, from which the scientific spirit proceeds. Now, in declaring that the intervention of philosophy is necessary in order to decide the ideological of ideologies and the scientific of sciences, the ideological and the scientific being specific productions and not simple properties of ideologies and sciences which would only have to be extracted or derived from their already given realities, Althusser displaces the analysis onto a completely other terrain, which is no longer that of the history of sciences—even one rooted in a social context overflowing the limits generally imparted to the activity of knowledge—but that of politics. His message in brief is thus as follows: cognitive practices do not suffice to trace, spontaneously, the lines of demarcation that permit a theory to acquire its material autonomy in disengaging itself from the relations of domination imposed by idealism; for that, what is indispensable is a taking sides [*prise de parti*] which only philosophy is capable of, in so far as it is this operation of taking sides that defines it. Whence the question: In assigning this role of supreme instance to philosophy, doesn't one re-establish in the development of knowledge a certain dimension of transcendence, rather than abandoning oneself to the intrinsic necessity of its history? Perhaps it is here that the theoretician error resides, the error which Althusser worried about in 1974 at the very moment when he published 'Philosophy and the Spontaneous Philosophy of Scientists, 1967', that is to say the text where this error was allowed its most free rein, in allotting to the philosophical intervention, whose anticipated issue was political, this pre-eminent role: This theoreticism was, as opposed to a vulgar scientism, what one might call a philosophism, that is to say an absolute confidence in the impartial mission of philosophy.

This difficulty, and the gap that separates his position from that of the historical epistemologists who he declared as his inspiration, however, was not apparent to Althusser in 1967 when he gave his introductory Philosophy Course for Scientists. Why? Doubtless because he was really thinking of other things, upon which all his attention was fixed. This is what can be understood in reading thesis 25, in the second lecture, where the spontaneous philosophy of the scientists is defined:

In their scientific practice, specialists from different disciplines 'spontaneously' recognize the existence of philosophy and the privileged relation of philosophy to the sciences. This recognition is generally unconscious: it can, in certain circumstances, become partially conscious. But it remains enveloped in the forms proper to unconscious recognition: these forms constitute the 'spontaneous philosophies of scientists' (SPS).

Here the idea emerges that the practice of scientific knowledge is haunted by philosophy, and this most often unknowingly, unconsciously. This returns us to a theme we have already encountered: Philosophy is not before us, as something additional, as an external instance which, under certain conditions, comes to add itself to what is already given to knowledge, but, always already there, it is behind us; in some way it is, on the level of theory, our unconscious. From this point of view, if the intervention of philosophy brings with it a transcendent dimension, it is precisely in so far as it overflows the proper plane of consciousness. Philosophy represents in the order of knowledge a principle of radical alterity, the irruption of obscure forces that, by definition, we are not master of; consequently, it alone can grasp these forces. The theoretician error was fundamentally that of believing that the philosophical operation took place entirely on the conscious level, whereas its issue decided itself on a more profound, more hidden plane, in the play of forces that are obscure by definition. Whence a conception of philosophy that haunted Althusser right to the end of his life, which reduced it to an attempt at a psychoanalysis of knowledge, in a sense that has little in common with Bachelard's psychoanalysis of knowledge. Where is the difference? For Bachelard, the point of attack of the psychoanalysis of knowledge is the imaginary, with its lazy archetypes, which reduce the mind to its immemorial schemata of reality-interpretation whose true terrain is poetry. For Althusser, who never ceased repeating that philosophy had no history, which is another way of saying that it ceaselessly turns in a circle, this circle was indeed concerned with immemorial forces that haunt all human activities, including those unfolding on the field of political action—but these forces have

nothing to do with those that feed the poetic imagination. These forces, whose confrontation resembles that of Eros and Thanatos as theorised by Freud at the end of his life, belong to the order of the unrepresentable, the unobjectifiable, and it is to the latter that they owe their radicality; they are delivered only through symptomatic formations which call not for a hermeneutical-type decrypting but for an active intervention, leading to the same field where their effects inexorably unfold. This intervention consists in tracing the lines of demarcation, which in reality only retread the lines already traced, and demand to be retraced again, with no assignable issue, in so far as the conflict of forces that it brings to light cannot emerge as a definitive division that would once and for all isolate all its manifestations. One might see in this approach the index, not so much of a vulgar theoreticism, as of a mystique of the philosophical, which would fundamentally be the last word of Althusserianism, a last word which no 'autocritique' would succeed in rescinding.

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